ILLUMINATION

POWER COORDINATION

(1) SEE SC&DI SHEETS FOR CONTINUATION OF POWER CIRCUIT.

(2) SEE SIGNING SHEETS FOR CONTINUATION OF POWER CIRCUIT.

(3) SEE SIGNAL SHEETS FOR CONTINUATION OF POWER CIRCUIT.

LIGHT STANDARDS

(8) POLE AND LUMINAIRE TO BE INSTALLED BY UTILITY COMPANY.

(9) POLE TO BE RELOCATED BY UTILITY COMPANY.

(10) CONSTRUCT FOUNDATION AND INSTALL LIGHT STANDARD.

(11) CONSTRUCT FOUNDATION PER STANDARD PLAN J-1b WITH BOLT PATTERN MODIFIED TO MATCH FOUR BOLT CONFIGURATION SPECIFIED BY THE MANUFACTURER. INSTALL DECORATIVE LIGHT STANDARD. SEE DETAIL ON SHEET **.

(12) CONSTRUCT BARRIER FOUNDATION AND INSTALL LIGHT STANDARD. SEE DETAIL ON SHEET **.

NOTE: USE ONLY IF STANDARD PLAN C-8b CONCRETE BARRIER LIGHT STANDARD SECTION WILL NOT BE USED.

ALT A: CONSTRUCT CONCRETE BARRIER LIGHT STANDARD SECTION AND INSTALL LIGHT STANDARD.

NOTE: USE WHEN STANDARD PLAN C-8b IS APPLICABLE.

(13) CONSTRUCT FOUNDATION AND RELOCATE EXISTING LIGHT STANDARD. VERIFY BOLT PATTERN BEFORE CONSTRUCTING FOUNDATION.

ALT A: CONSTRUCT FOUNDATION AND INSTALL LIGHT STANDARD TO BE RELOCATED FROM STA ****. VERIFY BOLT PATTERN PRIOR TO CONSTRUCTION OF FOUNDATION.

ALT B: CONSTRUCT FOUNDATION. RELOCATE EXISTING LIGHT STANDARD TO NEW FOUNDATION AS INDICATED IN THE LUMINAIRE SCHEDULE. VERIFY BOLT PATTERN PRIOR TO CONSTRUCTION OF FOUNDATION.

NOTE: CALL FOR REPLACEMENT OF METAL TAG AND RELABELING TO SHOW CORRECT LUMINAIRE NUMBER, WATTAGE AND VOLTAGE WHERE NECESSARY.

(14) REPLACE LIGHT STANDARD. VERIFY BOLT PATTERN PRIOR TO ORDERING LIGHT STANDARD.

(15) REMOVE LIGHT STANDARD AND FOUNDATION. BACKFILL.

(16) REMOVE TEMPORARY TIMBER LIGHT STANDARD AND APPURTENANCES.

NOTE: SHOULD ONLY BE USED WHEN ONE CONTRACT PUTS THE TEMPORARY IN AND IT REMAINS AFTER THE CONTRACT IS FINISHED, AND ANOTHER CONTRACT TAKES IT OUT AFTER THE FIRST CONTRACT IS COMPLETE. REMEMBER TO PUT SOMETHING IN SPECIALS ABOUT DISPOSAL SINCE THE TEMPORARY SPECIAL WILL NOT BE USED.

(17) CHIP OUT THE LIGHT STANDARD BARRIER FOUNDATION AREA TO APPROXIMATELY 1" IN DEPTH. BY MECHANICAL MEANS CUT ANCHOR BOLTS AND CONDUIT STUB. PLUG CONDUIT. PREP REPAIR AREA WITH BONDING AGENT AND EPOXY GROUT TO MATCH EXISTING BARRIER.

POWER COORDINATION

(24) REMOVE JUNCTION BOX AND ABANDON CONDUIT. BACKFILL.

(25) INTERCEPT CONDUIT, CONNECT NEW CONDUIT TO EXISTING AND ROUTE AS SHOWN. MAINTAIN ALL BONDING AND GROUNDING.

(26) INSTALL SURFACE MOUNTED **" x **" x **" (L X W X H) NEMA JUNCTION BOX. SEE DETAIL ON SHEET ****.

(27) INTERCEPT CONDUIT AND INSTALL JUNCTION BOX.

NOTE: USALLY INVOLVES REPLACEMENT OF WIRING. SEE 8-20.3(8) FOR WIRING REQUIREMENTS. SHOW WIRE NOTES WHERE APPLICABLE.

(28) SPLICE NEW CONDUCTORS TO APPROPRIATE EXISTING CIRCUIT CONDUCTORS PER WIRING SCHEDULE.

(29) REMOVE CONDUCTORS FROM CONDUIT. PREPARE CONDUIT FOR FUTURE USE.

(30) INTERCEPT CONDUIT AND INSTALL ** x ** x ** (L X W X H) NEMA JUNCTION BOX. SEE DETAIL ON SHEET **.

NOTE: USALLY INVOLVES REPLACEMENT OF WIRING. SEE 8-20.3(8) FOR WIRING REQUIREMENTS. SHOW WIRE NOTES WHERE APPLICABLE.

(31) ROUTE CONDUIT FROM STRUCTURE TO GRADE. ROUTE TO AVOID CONFLICT WITH GUARDRAIL POST INSTALLATION. INSTALL EXPANSION/DEFLECTION FITTING. SEE BRIDGE SHEETS.

(32) ROUTE CONDUIT FROM STRUCTURE TO GRADE. ROUTE TO AVOID CONFLICT WITH GUARDRAIL POST INSTALLATION. INSTALL EXPANSION/DEFLECTION FITTING. SEE DETAIL ON SHEET ****.

(33) REPLACE TYPE 1 JUNCTION BOX WITH TYPE 2 JUNCTION BOX.

(34) RE-LABEL EXISTING CONDUCTORS PER WIRING SCHEDULE.

NOTE: USE THIS ONLY WHEN EXISTING CONDUCTORS ARE BEING RE-LABELED. SEE STANDARD SPECIFICATION 8-20.3(8)

(35) ROUTE CONDUIT PER DETAIL. SEE SHEET ****.

(36) COIL ** OF CIRCUIT "*" CONDUCTORS IN JUNCTION BOX FOR FUTURE USE.

NOTE: MAKE SURE JUNCTION BOX ACTUALLY HAS ADEQUATE ROOM FOR THE WIRE.

(37) SEE BRIDGE PLANS FOR CONDUIT INSTALLATION.

(38) SEE RETAINING WALL PLANS FOR CONDUIT INSTALLATION.

(39) TS

(40) LT

(41) COMM

(42) SC&DI

POWER COORDINATION

(50) JACK CONDUIT ACROSS ROADWAY.

(51) BORE A **" DIAMETER CASING ACROSS ROADWAY. ROUTE CONDUIT AND CONDUCTORS THROUGH CASING. CASING SHALL BE INSTALLED TO A MINIMUM DEPTH OF **FT BELOW THE ROAD BED. THE BORING PIT SHALL BE NO LARGER THAN **FT X **FT.

NOTE: LAST LINE CAN BE OMITTED IF UNLIMITED SPACE, AND DISCUSSED IN ADVANCE WITH CONSTRUCTION OFFICE.

(53) CONSTRUCT FOUNDATION AND INSTALL TYPE "E" SERVICE PER STANDARD PLAN J-3d WITH THE EXCEPTION THAT THE TRANSFORMER SHALL BE RATED AT **KVA. INSTALL A **AMP SECONDARY CIRCUIT BREAKER. SEAL CABINET TO THE FOUNDATION WITH A ½" BEAD OF SILICONE. COORDINATE POWER CONNECTION WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

(54) CONSTRUCT FOUNDATION AND INSTALL TYPE "D" SERVICE CABINET. SEAL CABINET TO THE FOUNDATION WITH A ½" BEAD OF SILICONE. COORDINATE POWER CONNECTION WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

(55) CONSTRUCT FOUNDATION AND INSTALL STRUT MOUNT MODIFIED TYPE "B" SERVICE. COORDINATE POWER CONNECTION WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

(56) INSTALL POST MOUNT MODIFIED TYPE "B" SERVICE. COORDINATE POWER CONNECTION WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

(57) REMOVE TYPE "D" SERVICE CABINET, FOUNDATION AND CONDUIT ELBOWS. BACKFILL. COORDINATE POWER DISCONNECT AND METER REMOVAL WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

(58) REMOVE TYPE "B" SERVICE CABINET, POLE AND CONDUIT ELBOWS. BACKFILL. COORDINATE POWER DISCONNECT AND METER REMOVAL WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

NOTE: THIS IS FOR POLE MOUNTED SERVICE ONLY.

ALT B: REMOVE MODIFIED TYPE "B" SERVICE CABINET, POST AND CONDUIT ELBOWS. BACKFILL. COORDINATE POWER DISCONNECT AND METER REMOVAL WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

NOTE: THIS IS FOR POST MOUNTED SERVICE ONLY.

(59) REMOVE MODIFIED TYPE "B" SERVICE CABINET, FOUNDATION AND CONDUIT ELBOWS. BACKFILL. COORDINATE POWER DISCONNECT AND METER REMOVAL WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

NOTE: THIS IS ONLY FOR A SERVICE MOUNTED ON A FOUNDATION.

(60) DISCONNECT ALL CIRCUITS FROM THE TYPE "E" SERVICE CABINET. REMOVE SERVICE CABINET AND INSTALL A NEW TYPE "E" SERVICE CABINET ON THE EXISTING FOUNDATION PER STANDARD PLAN J-3d WITH THE EXCEPTION THAT THE TRANSFORMER INSTALLED SHALL BE RATED AT **KVA. INSTALL A **AMP SECONDARY CIRCUIT BREAKER. SEAL CABINET TO THE FOUNDATION WITH A ½" BEAD OF SILICONE. VERIFY BOLT PATTERN PRIOR TO ORDERING CABINET. COORDINATE POWER CONNECTION WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

NOTE: CHECK FOUNDATION SIZE ON OLDER CABINETS

(61) REMOVE POLE MOUNTED TYPE "C" SERVICE CABINET. LEAVE TIMBER POLE FOR POWER CONNECTION TO NEW SERVICE. COORDINATE POWER DISCONNECT AND METER REMOVAL WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

(62) INSTALL CONDUIT, CONDUCTORS, WEATHERHEAD AND INSULATED CLEVIS ON EXISTING TIMBER POLE PER UTILITY COMPANY REQUIREMENTS. COORDINATE POWER CONNECTION WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

(63) ROUTE CONDUIT AND CONDUCTORS UP UTILITY POLE PER UTILITY COMPANY REQUIREMENTS. COODINATE POWER CONNECTION WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

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SHEET 1 OF 3 SHEETS

ILLUMINATION

POWER COORDINATION

(64) ROUTE CONDUIT TO UTILITY COMPANY PEDESTAL. COORDINATE POWER CONNECTION WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

(65) ROUTE 2'' CONDUIT RISER 10' UP THE UTILITY POLE WITH STAND-OFF BRACKETS PER UTILITY COMPANY REQUIREMENTS. PROVIDE ADDITIONAL CONDUIT AND CONDUCTORS FOR UTILITY COMPANY PER THEIR REQUIREMENTS. COORDINATE POWER CONNECTION WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

NOTE: FOR PUGET SOUND ENERGY

ALT A: INSTALL **FT CLASS V TREATED TIMBER POLE WITH CONDUIT, CONDUCTORS WEATHERHEAD AND INSULATED RIGID CLEVIS PER UTILITY COMPANY REQUIREMENTS. COORDINATE POWER CONNECTION WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

(66) ROUTE UNFUSED SERVICE CONDUCTORS TO UTILITY COMPANY CONNECTION POINT AND TERMINATE CONDUCTORS PER UTILITY COMPANY REQUIREMENTS. COORDINATE POWER CONNECTION WITH THE UTILITY COMPANY THROUGH THE ENGINEER.

(67) CONNECT NEW CONDUCTORS TO THE EXISTING SPARE **AMP BREAKER IN THE SERVICE CABINET. LABEL AS CIRCUIT *.

(68) INSTALL A ***VOLT **AMP BREAKER IN THE EXISTING SERVICE CABINET. LABEL AS CIRCUIT *.

(69) REPLACE THE BREAKER FOR CIRCUIT * WITH A ***VOLT ** AMP BREAKER.

(70) THE CONTRACTOR SHALL VERIFY THE ONE-LINE DIAGRAM INCLUDED IN THE PLANS AND MAKE CHANGES ON THE DIAGRAM TO REFLECT THE ''AS-BUILT'' CONFIGURATION. CONTRACTOR SHALL PLACE THE DIAGRAM IN A PLASTIC PROTECTIVE COVERING AND LEAVE IT IN THE SERVICE CABINET.

STRUCTURES

(80) ATTACH CONDUIT TO STRUCTURE WITH UNISTRUT. SEE DETAIL ON SHEET ****.

(81) CLAMP CONDUIT TO GIRDER. SEE DETAIL ON SHEET ****.

NOTE: INSURE DETAIL HAS NOTE STATING NO PENETRATION OF CLAMP OR ATTACHMENTS INTO GIRDER.

(82) GENERAL NOTE: JUNCTION BOX LABELING SHOWN FOR STRUCTURES ONLY. LABEL ALL OTHER JUNCTION BOXES PER STANDARD PLAN J-11a AND SPECIAL PROVISIONS.

NOTE: PLACE THIS GENERAL NOTE ONLY ON ELECTRICAL SHEETS WITH STRUCTURES ON THEM. DO NOT LABEL JUNCTION BOXES THAT ARE NOT IN OR ON A STRUCTURE, WITH THE EXCEPTION OF THE TWO INGRADE JUNCTION BOXES BEFORE OR AFTER THE STRUCTURE. THESE BOXES ARE LABELED TO MAINTAIN CONDUIT SEPARATION FROM GRADE AT BEGIN BRIDGE TO GRADE AT END BRIDGE.

SIGN LIGHTS

(85) REPLACE SIGN LIGHT FIXTURE WITH A ***VOLT FIXTURE. SEE SIGNING SHEETS FOR SIGN LIGHT DETAILS.

UNDERDECKS

(90) MOUNT UNDERDECK LUMINAIRE ON STRUCTURE. SEE DETAIL ON SHEET ****.

TRAFFIC SIGNAL

SIGNAL STANDARDS

(111) CONSTRUCT FOUNDATION AND INSTALL TYPE ** SIGNAL STANDARD, VEHICLE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS, PUSHBUTTON ASSEMBLIES, PREEMPTION DETECTOR AND TERMINAL CABINET PER STANDARD DETAIL SHEET.

(112) CONSTRUCT FOUNDATION AND INSTALL TYPE ** SIGNAL STANDARD WITH SLIP BASE, VEHICLE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS, PUSHBUTTON ASSEMBLIES, PREEMPTION DETECTOR AND TERMINAL CABINET PER SIGNAL STANDARD DETAIL SHEET.

NOTE: GET DETAIL SHEET FROM SC&DI- THIS IS USALLY A TYPE PS STANDARD, DO NOT USE A SLIP BASE WITH TYPE II, III OR V SIGNAL STANDARDS.

(113) THE STABILITY OF THE EXISTING STRAIN POLE SHALL BE MAINTAINED DURING INSTALLATION AND CURING OF THE NEW FOUNDATION.

(114) REMOVE SIGNAL STANDARD, ASSOCIATED EQUIPEMENT AND FOUNDATION. BACKFILL.

(115) INSTALL TERMINAL CABINET ON EXISTING SIGNAL POLE. REPLACE CONDUCTORS FROM MASTARM TO TERMINAL CABINET PER WIRE SCHEDULE.

(116) REPLACE VEHICLE SIGNAL HEAD PER SIGNAL DISPLAY NOTE.

(117) INSTALL TENON ON MASTARM. SEE DETAIL ON SHEET **. SEE SIGNAL STANDARD DETAIL SHEET.

LOOPS

(123) INSTALL TYPE R1 INDUCTION LOOP. SEE SHEETS **.

NOTE: USE NOTE FOR ROUND LOOPS. ALT NOTE IS THE OLD INDUCTION LOOP NOTE.

ALT A: INSTALL TYPE 2 INDUCTION LOOP.

(124) INSTALL TYPE R2 INDUCTION LOOP. SEE SHEETS **.

NOTE: USE NOTE FOR ROUND LOOPS. ALT NOTE IS THE OLD INDUCTION LOOP NOTE.

ALT A: INSTALL (6FT x **FT) TYPE 1 INDUCTION LOOP.

(125) INSTALL TYPE R3 INDUCTION LOOP. SEE SHEETS **.

NOTE: USE NOTE FOR ROUND LOOPS. ALT NOTE IS THE OLD INDUCTION LOOP NOTE.

ALT A: INSTALL (6FT x **FT) TYPE 1 INDUCTION LOOP.

(126) TAG ALL EXISTING LOOP WIRES AND VERIFY EXISTING LOOP WIRING SCHEMATIC BEFORE BREAKING LOOP SPLICE.

(127) BREAK LOOP SPLICE. REPLACE 2C(S) PER WIRE SCHEDULE AND SPLICE TO EXISTING LOOP.

(128) REMOVE 2C(S) WIRE TO THE CONTROLLER. ABANDON LOOP.

(129) SPLICE NEW 2C(S) WIRE TO EXISTING LOOP LEAD-INS.

CONTROLLER

(134) CONSTRUCT PAD FOUNDATION AND INSTALL SIGNAL CONTROLLER AND CABINET, WITH THE FRONT DOOR FACING ****, PER STANDARD PLAN J-6c. SEAL CABINET TO FOUNDATION WITH A 1/2'' BEAD OF SILICONE.

(135) INSTALL MASTER CONTROLLER.

(136) CONSTRUCT FOUNDATION AND INSTALL SIGNAL CONTROLLER, CABINET AND MODIFED TYPE ''B'' SERVICE PER STANDARD PLAN J-3b WITH FRONT DOOR OF CONTROLLER FACING *****. SEAL CABINET TO FOUNDATION WITH 1/2'' BEAD OF SILICONE.

(137) REMOVE CONTROLLER CABINET, FOUNDATION AND CONDUIT ELBOWS. BACKFILL.

(138) CONSTRUCT FOUNDATION. INSTALL SIGNAL CONTROLLER AND CABINET. INSTALL 480V/120V *** KVA DRY TRANSFORMER. TRANSFORMER CABINET SHALL BE 36''H x 24''W x 18''D. SEE FOUNDATION AND TRANSFORMER DETAILS ON SHEETS ***.

(145) ROUTE CONDUIT TO CONTROLLER THROUGH SIDE PANEL WITH WATERTIGHT CONNECTION. SEE DETAIL ON SHEET ***.

NOTE: SHOW PENETRATION POINT, CONDULET, CONDUIT ROUTING ETC. WITH DETAIL

POWER COORDINATION

(151) SEE ILLUMINATION PLANS FOR ROUTING OF SC&DI POWER SUPPLY.

(152) SEE ILLUMINATION PLANS FOR CONTINUATION OF POWER CIRCUIT.

(153) REMOVE EXISTING TIMBER POLE. BACKFILL.

(154) REMOVE ELBOWS OF ABANDONED CONDUIT.

(155) ATTACH CONDUIT TO BRIDGE BARRIER. ROUTE CONDUIT FROM STRUCTURE TO GRADE AND INSTALL DEFLECTION FITTING. SEE DETAIL ON SHEET ***.

(156) SPLICE NEW CONDUCTORS TO EXISTING SIGNAL POWER CIRCUIT.

FLASHER

(164) INSTALL ***** FLASHER PER DETAIL SHEET ***.

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TRAFFIC SIGNAL

DEMOLITION

(177) REMOVE SPANWIRE, CONDUIT ON SIGNAL POLE AND CONDUCTORS. REPLACE HANDHOLE COVER USING EXISTING COVER.

(178) REMOVE SIGNAL STRAIN POLE, FOUNDATION, SPANWIRE AND ASSOCIATED EQUIPMENT. BACKFILL.

NOTE: STEEL STRAIN POLE WITH FOUNDATION

PRE-EMPTION

(184) REPLACE EMERGENCY PREEMPTION DETECTOR.

(185) RELOCATE PREEMPTION DETECTORS FROM SPAN WIRE TO MASTARM. PROVIDE MOUNTING EQUIPMENT PER MANUFACTURER'S RECOMMENDATION.

(186) INSTALL PREEMPTION DETECTOR ON MASTARM. ROUTE 3C(SH) BETWEEN CONTROLLER AND DETECTOR AND TERMINATE. SEE SIGNAL STANDARD SHEET.

INTERCONNECT

(190) INSTALL AERIAL SPLICE ENCLOSURE FOR INTERCONNECT CABLE. ATTACH CONDUIT AND INTERCONNECT CABLE TO UTILITY POLE PER UTILITY COMPANY REQUIREMENTS.

NOTE: GET PERMISSION FROM UTILITY COMPANY TO USE UTILITY POLE.

(191) DISCONNECT 6 PAIR COMMUNICATION CABLE FROM THE CONTROLLER CABINET. PULL BACK TO JUNCTION BOX AND ROUTE AS SHOWN.

(192) INTERCEPT INTERCONNECT CABLE AND INSTALL AERIAL SPLICE ENCLOSURE. ROUTE INTERCONNECT CABLE AS SHOWN.

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